

Reimbursement/Billing Policy

3D Printed Models, Implants, Surgical Navigation Systems, and Cardiac Mapping Systems

Policy Number: RM046

Last Review: 12/15/2025

GUIDELINES:

- Paramount Reimbursement Policies have been developed to assist in administering proper payment under benefit contracts.
- Reimbursement policies may be superseded by mandates in provider, state, federal, or CMS contracts and/or requirements.
- Paramount utilizes industry standard coding methodology and claims editing in the development of reimbursement policies. Industry standard resources include, but are not limited to, CMS National Correct Coding Initiative (NCCI), Medically Unlikely Edits (MUEs), Integrated Outpatient Code Editor (I/OCE) Clinical edits, Medical Policies, Reimbursement Policies, and Administrative/Provider Manuals. Paramount will not reimburse services determined to be Incidental, Mutually Exclusive, or Unbundled.
- All health care services, devices, and pharmaceuticals must be billed with Current Procedure Terminology (CPT) codes, Healthcare Common Procedure Coding System (HCPCS) codes and/or revenue codes and modifiers, which most accurately represent the services rendered, unless otherwise directed by the Paramount. All billed codes must be fully supported in the member's legal medical record.
- Paramount utilizes CMS pricing algorithms where appropriate based on, National Physician Fee Schedule Relative Value File (NPF SRVF) pricing rules, Inpatient Prospective Payment Systems (MS-DRG, LTC, IPF, IRF & IPSNF) and Outpatient Prospective Payment Systems (OPPS, HHA, ASC, ESRD & OPSNF).
- Paramount liability will be determined after coordination of benefits (COB) and third-party liability (TPL) is applied to the claim. Member liability may include, but is not limited to, co-payments, deductibles, and coinsurance. Members' costs depend on member benefits.
- Paramount routinely reviews reimbursement policies. Updates are published on Paramount's website <https://www.paramounthealthcare.com>. The information presented in this reimbursement policy is accurate and current as of the date of publication. Paramount communicates policy updates to providers via Paramount's monthly bulletin.

SCOPE:

- ☒ Professional
- ☒ Facility

Applicability:

- ☒ Commercial and Marketplace (Fully Insured and Self-Funded)
- ☒ Medicare Advantage

Background:

Three-dimensional (3D) printing has become increasingly utilized in the healthcare setting. 3D printing is a technique that creates 3D objects by building successive layers of source material such as plastic, metal or nylon. For medical applications the printed models are derived from patient imaging such as a magnetic resonance image (MRI) or a computer-aided design (CAD) drawing. Patient-specific anatomic models can then be used for multiple clinical applications including pre-surgical planning and rehearsal, intraoperative templates and guides and customized implants and devices. The use of 3D printed anatomic models for surgical planning and guidance is thought to improve patient outcomes and reduce surgery time.

Surgical navigation is a successor of frame-based stereotactic procedures. It is used to guide the surgeon to find a specific anatomical target, avoid areas of risk, and offer intraoperative orientation in the absence of anatomical landmarks. It can also support the optimal alignment of implants and act as a 3D measurement system. Modern surgical navigation systems use a stereoscopic camera emitting infrared light which can determine a 3D position of prominent structures which allows for real-time tracking of the marker spheres.

Cardiac mapping is the registration of the spatial distribution of cardiac functional characteristics, typically of localized electrical potentials. The development and availability of accurate 3D localization technology has made 3D mapping an important part of routine clinical cardiac electrophysiologic care.

Reimbursement Policy:

Paramount considers reimbursement for anatomic 3D printing of surgical models, implants, surgical navigation guides, and/or cardiac mapping systems, including integral components of cardiac mapping systems (e.g., patches and electrodes), (including, but not limited to, CPT Codes 0559T, 0560T, 0561T and 0562T) to be included in payment for the primary procedure and therefore not eligible for separate reimbursement. No additional payment will be made when charges associated with anatomic 3D printing of surgical models, implants, surgical navigation guides, and/or cardiac mapping systems, including integral components of cardiac mapping systems (e.g., patches and electrodes), are billed on professional or institutional claims, including but not limited to, increased or additional operating room charges for anatomic 3D printing of surgical models, implants, surgical navigation guides, and/or cardiac mapping systems, including integral components of cardiac mapping systems

Sources of Information:

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 - Health Technology Assessment. 3D-printed orthopedic implants. (2021, January 28).
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expert consensus statement on three-dimensional mapping systems for tachycardia developed in collaboration with HRS, EHRA, and LAHRS. Journal of Arrhythmia, 36(2), 215–270. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7132207/>. Accessed May 3, 2024.

- Centers for Medicare & Medicaid Services (CMS), Medicare Claims Processing Manual, Pub. 100-04, Chapter 4 – Part B Hospital (Including Inpatient Hospital Part B and OPPS), Section 10.4. Available at <https://www.cms.gov/regulations-and-guidance/guidance/manuals/downloads/clm104c04.pdf>. Accessed May 3, 2024.
- 42 CFR 419.2(b)

Anatomic 3D Printing applicable codes include, but are not limited to, the list below:

Applicable Code(s):	
CPT:	0559T, 0560T, 0561T, 0562T
HCPCS:	
ICD10 Procedure Codes:	

REVISION HISTORY EXPLANATION: ORIGINAL EFFECTIVE DATE:

Date	Explanation & Changes
12/15/2025	Policy Created